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(54) QUANTITATIVE MEASUREMENT OF MINUTE
AMOUNT OF CALCIUM COMPONENT IN
AQUEOUS SOLUTION

(57) Abstract:

PURPOSE: To measure the concn. of a minute amount of calcium in good precision by an absorption photometry without receiving the influence of a magnesium salt or the like, by a method wherein glycine or aspartic acid is added and alizarin acid black SN is further added to perform colorimetric analysis.

CONSTITUTION: After a NaOH 10% solution is added to an aqueous 7% Na_2SO_4 solution containing a

minute amount of calcium and magnesium to adjust the pH thereof to 11.5, an aqueous 1% glycine solution is added to and mixed in the pH adjusted solution. In the next step, an aqueous 0.1% alizarin acid black SN solution is added thereto and pure water is added to measure absorbency by a spectrophotometer. When the aqueous solution of glycine or aspartic acid is added, the influence of a magnesium ion is not received even if it is present at pH of 11.5W13.0. The addition amount of glycine or aspartic acid is sufficient if added in an amount of 0.0001wt% or more. The addition amount of arizarin acid black SN as an indicator is 0.0001W0.01wt%.

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JP59005956A2: QUANTITATIVE MEASUREMENT OF MINUTE AMOUNT OF CALCIUM COMPONENT IN AQUEOUS SOLUTION

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